

Application No. 09/575,552

Docket No. 22-0099

Amendments to the Claims

1-3 (Cancelled).

4 (Previously Presented): A method for scheduling, in real-time, an order in which data packets from a plurality of uplink channels stored in priority-class queues are organized in a downlink channel of a satellite communications network, the method comprising:

conveying data packets over a downlink channel in an order determined by a packet service schedule;

monitoring at least one traffic parameter associated with at least one data stream stored in a priority-class queue, the traffic parameter being representative of an actual bandwidth usage of the corresponding priority-class queue;

while conveying data packets over the downlink channel, modifying the packet service schedule based on said at least one traffic parameter; and

measuring a phase of each data stream stored in a priority-class queue, said phase being indicative of an amount of time lapsed since a data packet from a particular priority-class queue was output to the downlink channel.

5-10 (Cancelled).

11 (Previously Presented): A method for scheduling, in real-time, an order in which data packets from a plurality of uplink channels stored in priority-class queues are organized in a downlink channel of a satellite communications network, the method comprising:

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conveying data packets over a downlink channel in an order determined by a packet service schedule;

monitoring at least one traffic parameter associated with at least one data stream stored in a priority-class queue, the traffic parameter being representative of an actual bandwidth usage of the corresponding priority-class queue;

while conveying data packets over the downlink channel, modifying the packet service schedule based on said at least one traffic parameter; and

adjusting the bandwidth allocated to at least one priority-class queue, while the priority-class queue is storing data packets.

12 (Previously Presented): A method for scheduling, in real-time, an order in which data packets from a plurality of uplink channels stored in priority-class queues are organized in a downlink channel of a satellite communications network, the method comprising:

conveying data packets over a downlink channel in an order determined by a packet service schedule;

monitoring at least one traffic parameter associated with at least one data stream stored in a priority-class queue, the traffic parameter being representative of an actual bandwidth usage of the corresponding priority-class queue;

while conveying data packets over the downlink channel, modifying the packet service schedule based on said at least one traffic parameter; and

modifying the packet service schedule by adjusting an amount of bandwidth allocated to at least one priority-class queue while the priority-class queue is storing data packets.

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13-14 (Cancelled).

15 (Previously Presented): A communications satellite, comprising:

at least one uplink and downlink for conveying data packets over communications channels;

queues for collecting data packets from uplinks and outputting the data packets to a downlink using a dynamic amount of bandwidth;

a scheduler for allocating bandwidth to at least one queue, said scheduler changing an amount of bandwidth allocated to at least one queue while said queue is buffering data packets between an uplink and downlink; and

a look-up table storing a master frame allocating bandwidth to at least one queue, said master frame comprising a plurality of time slots, each time slot including a priority queue index identifying a queue to output a data packet during the associated time slot.

16-21 (Cancelled).

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